

respectfully traversed based on the following discussion.

The present invention resolves a problem of improving the voice reception quality in a voice transceiver by providing a smooth and uninterrupted voice data supply to the speaker. Applicant proposes to store the digital voice data before a conversion into a speaker buffer 501 in the same time providing detection and control data stored in this buffer. As a result, the digital voice signal is supplied to a converter more smoothly even when the transmission data is disrupted and indeed the quality of the voice data reception is improving.

The Henley et al. system provides a method for transmitting and receiving digitized audio data in a packet-based computer network to compensate for jitter. The jitter in the network is primarily due to data traffic congestion. That is Henley et al. resolve the absolutely different problem related to the improving transmission of audio data through a computer network. Henley et al state: "audio data are extremely time sensitive, and as a result, the system hardware, software and transport protocol must be precisely coordinated to realign the audio data at the receiving end". Therefore, it should be apparent that the Henley's system deals with an audio data stream, in other words with a plurality of audio signals, which should be organized certain way to be properly transmitted. Henley et al. organize the data into packets, which comprise portions of the stream and have a position identification for transmitting the data through a backbone of the computer network. For unpacking those packets, Henley et al. use a buffer in which the packets of the audio data are received and organized according the a position identifier determining the location. The buffer in Henley et al. is not the same as in the claimed invention. The buffer in Heley et al. permits synchronizing portions of the inputted stream of digital audio data to compensate for the variable periods of transmission time. In contrast, Applicant's system deals with a single audio signal, which does not need special organization for transmission. There is not any special identification for received data when it is saved into the buffer. Furthermore, the Applicant's system improves smoothness of the audio signal, supplied into converter, by controlling the digital voice data stored in the speaker buffer and detection of the quantity of the data in the buffer. There is neither the same nor similar to the control and detection in the Henley et al. As amended, it is submitted that claim 1 clearly defines over any combination of references which include Heley et al.

The patent to Shiono is focused on the problem of a slowness in synthetic speech generation, e.g. the synthetic speech is slower than the calculation speed responding to the key operation in an electronic apparatus, which could cause that new information to be audibly announced before the last information announcement is completed. Thus the previous part of the last message may be omitted due to the new message. Shiono resolves this problem by a synthetic speech system with data first stored in a buffer memory, wherein the speech announcement is conducted in accordance with the speech data stored in the buffer memory. Shiono stores the data by using address codes, which help to extract messages to be sent to the speech generator in a proper order.

The Examiner states that patent to Shiono provides an obviousness background for a detection part of the Applicant's system, which is not taught by the primary reference to Henley et al. First, Applicant respectfully points out that the principal of the detection in Shiono is significantly different from the present invention, because the data is organized in different way. Second, Shiono does not detect a quantity of data rather it only addresses number detection. The patent to Shiono teaches a buffer 36, which is used for storing the code signal for selecting the speech data stored in the quantized speech data memory 38. In contrast Applicant proposes to use buffer 501 for storing digital voice data directly before converting. Referring now to Figure 1 in Shiono, buffer 36 is located before the speech generation section and has blocks 46, 48, 52, 38 between it and D/A convertor. Also, special organization of stored data is used by Shiono:

“...the speech data buffer memory 36 stored the speech information in a syllable order and the count operation of the speech data buffer pointer 40 is conducted in the syllable order.”

For synchronizing of the audibly announced data and upcoming data, a control of speed of the speech generator as well as an address control of the stored data are provided.

However, there is no quantity of data detection in the buffer as well as an immediate conversion of the data from buffer Shiono. All references relied on by the Examiner teach away from the present invention and claim 1 clearly defines over Henley et al. and Shiono for the following reasons:

- no reference provides detecting the quantity of data in a speaker buffer;

Serial No.: 09/315,058
Docket No.: OSP-8180
Page 5

- no reference teaches a control of an amount of the data by low and high predetermined values.

These features provide the advantages of the present invention, which is a smooth supply of the audio data to the converter.

Claim 4 was rejected being obvious over a combination of Henley, Shiono and U.S. Patent 5,617,423 to Li. This rejection is traversed. Li does not supply any of the missing features discussed above in connection with Heley et al and Shiono. As such no combination of references could make the claimed invention obvious.

In view of the foregoing amendments and remarks, Applicant submits that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicant hereby makes a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,



Olga V. Merkoulouva
Registration No.48,757

Tel. (703) 391-2510 or (703) 787-9400
Fax. (703) 391-9035 or (703) 787-7557



30743

PATENT TRADEMARK OFFICE